

REMARKS

Reconsideration of the application is respectfully requested.

Claim rejection - 35 U.S.C. §112

The Office Action rejected claim 5 under 35 U.S.C. §112, second paragraph because the claims jump from step (a) to step (c) and is allegedly unclear. Without agreeing with the propriety of the rejection, the claim is being amended to correct the clerical formalities in the language. It is believed that the amendment now overcomes the rejection.

Claim rejection – 35 U.S.C. §102

Claims 1-8 and 10-17 stand rejected under 35 U.S.C. §102(a) as allegedly being anticipated by Arnold, M., “Online Profiling and Feedback-Directed Optimization of JAVA” (hereinafter “Arnold”). In this reply, claims 1 and 2 are being canceled without prejudice. Claim 10 is being amended to depend from claim 3 instead of canceled claim 1. New claim 18 is being added. Support for the new claim can be found at least in paragraph [0040] of the originally submitted specification.

Applicants respectfully traverse the rejections of claims 3-8 and 10-17.

Arnold describes online feedback-directed optimization. The cited sections of Arnold disclose modifying optimizing compiler to insert instrumentation to collect one particular type of profile, intraprocedural edge counts. Arnold, however, does not disclose or suggest every element claimed in the present application.

For example, with respect to independent claims 3 and 4, Arnold does not disclose or suggest at least, “(e) collecting a second profile for the executing application after applying the

one or more actions; and (f) detecting a phase shift in the executing application by utilizing the normalized profile and the second profile,” claimed in claim 3 and similarly claimed in claim 4.

Rather, Arnold as understood by applicant, appears to describe collecting a profile by executing an application once and using that collected profile for a variety of optimizations. Arnold appears to be concerned with modifying the collected profile for subsequent optimization phases in its analysis. Thus, Arnold appears to disclose performing subsequent optimizations based on the profile collected from a single execution of the application only. Arnold does not disclose or suggest to collect a second profile for the executing application after applying the one or more actions that were used to predict an impact on the first profile. Arnold also does not detect a phase shift in the executing application using the first profile and the second profile.

The Examiner specifically cites Arnold’s page 72, line 24 – page 73, line 6 as allegedly disclosing elements (e) and (f) claimed in claim 3. Contrary to the Examiner’s interpretation, those passages of Arnold describe analyzing the collected profiles and computing execution frequencies given the collected profiles for the first phase of Arnold’s optimization process. While Arnold uses the terminology “first phase,” that term as used in Arnold is in completely different context than used in the claimed language. That is, Arnold refers to the first phase of optimization process, unlike the claimed “phase shift” in the executing application. Arnold’s optimization process appears to be a static analysis that does not execute the application as part of that analysis.

For at least the above reasons, Arnold does not anticipate claims 3 and 4.

With respect to claims 5 and 6, the Examiner does not specifically address those claims with respect to the 102 rejection based on Arnold. Nonetheless, applicants submit that those claims are also not anticipated by Arnold, at least because Arnold does not disclose or suggest,

“collecting a second profile for the executing application after applying the one or more actions” as discussed above. In addition, Arnold also does not disclose or suggest, “evaluating the second profile against the normalized profile.” Furthermore, Arnold does not disclose or suggest, “applying second one or more actions to undo the one or more actions,” claimed in claim 5 and similarly recited in claim 6. Rather, as discussed above, Arnold appears to work with a single profile collected from a single execution of the application for its optimization process and modifies that profile for different phases of the optimization process.

Claims 7 and 8 are rejected based on substantially the same reasons as in claim 3. Therefore, the above reasons discussed with reference to claim 3, also apply to claims 7 and 8 in traversing the rejections. In addition, Arnold also does not disclose or suggest, “repeating steps (d)-(f) for the second normalized profile and every subsequently normalized profile and selected actions,” claimed in claim 7 and similarly recited in claim 8.

For at least the above reasons, it is believed that claims 3-8 are not anticipated by Arnold. Claims 10, 15, 16 and 17 are rejected based on the passage of Arnold that describes controller model. Those claims are dependent claims. Therefore, for at least the above reasons and by virtue of their dependencies, claims 10, 15, 16 and 17 are also not anticipated by Arnold.

For at least the foregoing reasons, it is believed that Arnold does not anticipate independent claims 3-8 and their respective dependent claims, at least by virtue of their dependencies.

This communication is believed to be fully responsive to the Office Action and every effort has been made to place the application in condition for allowance. A favorable Office Action is hereby earnestly solicited. If a telephone interview would be of assistance in

advancing prosecution of the subject application, the Examiner is requested to telephone the number provided below.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Eunhee Park".

Eunhee Park

Registration No.: 42,976

Scully, Scott, Murphy & Presser, P.C.
400 Garden City Plaza, Suite 300
Garden City, New York 11530
(516) 742-4343

EP:vh